

## ABSTRACT

The circuit with adaptive amplifier output common mode voltage adjustment includes: a differential pre-amplifier; a re-  
5 generated comparator having a differential input coupled to a differential output of the pre-amplifier; and a replica comparator coupled to a common mode node of the pre-amplifier for adjusting a common mode of the pre-amplifier. The replica  
10 comparator provides a trip-point reference to set the output common mode of the pre-amplifier. This sets the output common mode of the pre-amplifier to the most sensitive region of the re-generated comparator.